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electrochemically manufactured metal oxide membrane and the first binding substance is within the through-going channels in the substrate.

- 18. (new) The device according to claim 17, wherein the first binding substance is chosen from the group consisting of a nucleic acid probe, an antibody, an antigen, a receptor, a hapten and a ligand for a receptor.
- 19. (new) The device according to claim 17, wherein the first binding substance is covalently bound to the substrate.
- 20. (new) The device according to claim 17, wherein the metal oxide membrane is comprised of aluminum oxide.
- 21. (new) The device according to claim 17, wherein the first binding substance is synthesised in situ.
- 22. (new) The device according to claim 21, wherein a compound for synthesising the first binding substance is applied to a particular area using ink-jet technology.
- 23. (new) The device according to claim 22, wherein the compound is applied using electrostatic attraction.
- 24. (new) The device according to claim 17 wherein the first binding substance is applied to a particular area using ink-jet technology.
- 25. (new) The device according to claim 24, wherein the first binding substance is applied using electrostatic attraction.



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- 26. (new) A kit comprising a device according to claim 17, and a detection means for determining whether binding has occurred between the first binding substance and the analyte.
- 27. (new) Kit according to claim 26, wherein the detection means comprises a second binding substance provided with a label.
- 28. (new) The kit according to claim 27, wherein the label is capable of inducing a color reaction or capable of bio- or chemo- or photoluminescence.
- 29. (new) A method for the detection of an analyte in a sample, comprising the steps of
 - a) contacting the sample with a device according to claim 17,
- b) allowing binding to take place between the first binding substance and the analyte to be detected, and
- c) detecting whether binding has occurred between first binding substance and analyte.
 - 30. (new) The method of claim 29 wherein the analyte comprises nucleic acid.
- 31. (new) The method of claim 30. wherein the nucleic acid is derivable from human immunodeficiency virus.--